

REMARKS

Withdrawal of the previous rejections is gratefully acknowledged.

Reconsideration of the present application in view of the above amendments and following remarks is respectfully requested.

Status of the Claims

Claims 24-52 are presented. Claims 24, 26, 28-38, and 40-49 are amended. Independent claims 24, 36 and 44 are presently amended to recite the preferred melting range of the wax phase which includes an upper limit of about 50°C. Support is found in the specification page 6, lines 5-6, and original claim 4, now cancelled. The independent claims are also amended to include a weight range for the wax phase having a lower limit of 10%. Support is found in the specification on page 4, lines 7-16. The remaining amended claims are amended for clarity. Support is found throughout the specification as originally filed. Claims 25, 27, 39 and 50 are cancelled without prejudice. No new claims are added.

No new matter has been introduced.

Summary of the Invention as Claimed

One aspect of the claimed subject matter as presently amended is directed to a wax dispersion with an average particle size of 0.5 to 100 μm comprising (a) 10-75% of a wax phase with a melting point in the range of above 25 to about 50°C, comprising at least one oil or wax component selected from the group consisting of dialkyl(ene) ethers, dialkyl(ene) carbonates, dicarboxylic acids, hydroxyfatty alcohols and mixtures thereof, and at least one emulsifier, and (b) a water phase (claims 24, 26 and 28-35). Another aspect of the claimed invention as currently amended is drawn to a wax dispersion comprising (a) 10-25% of a wax phase having a melting point in the range of about 35 to about 50°C and (b) 75-90% of a water phase (claims 36-38 and 40-43). Still another

aspect of the claimed subject matter as presently amended is directed to a process for the production of such wax dispersions (claims 44-49). Yet another aspect of the invention as claimed is directed to a body care preparation comprising such wax dispersions (claims 51-52).

Rejections under 35 U.S.C. § 103(a)

Previously presented claims 24-26 and 28-29 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Nieendick (WO 02/056839; using US 2004/0086470 as English translation). Applicants respectfully traverse the rejection.

Nieendick discloses a pearlescent agent concentrate containing (a) about 30 to 60% by weight of a wax component; (b) about 5-25% by weight of a surfactant component; and (c) the remainder, to 100%, water. The wax phase has a **melting point greater than 55°C**, and may comprise fatty ethers and/or fatty carbonates, among others.

Although applicants do not necessarily agree with the Examiner's characterization of Nieendick, in order to further prosecution, the pending claims have been amended in a manner which overcomes the Examiner's rejection. Thus, the melting point range of applicants' wax phase has been amended to have an **upper limit of about 50°C**, as disclosed in the specification on page 6, lines 5-6. This is outside the limit imposed by Nieendick of >55°C for his pearlescent agents.

Previously presented claims 24-43 and 51-52 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Ansmann et al. (US 6,365,168; "Ansmann") in view of Fogel (US 5,840,285). Applicants respectfully traverse the rejection.

Ansmann discloses a pearlescent cosmetic composition containing (a) **0.1 to 5%, preferably 0.5 to 2%**, by weight of a dialkyl ether (col. 6, lines 5-6; claim 7); (b) a cationic polymer; and (c) an emulsifier selected from a specific group of

nonionic, anionic and amphoteric surfactants, including their mixtures. Even though applicants do not necessarily agree with the Examiner's characterization of Ansmann, in order to further prosecution, the claims have been amended in a manner to overcome the Examiner's rejection. Specifically, independent claims 24, 36 and 44 have been amended to include a weight limitation of the wax phase, with a **lower limit of 10%**. This is outside the range disclosed by Ansmann.

Also, as noted by the Examiner, Ansmann does not disclose a specific melting point for his dialkyl ether wax phase. In order to cure this deficiency, the Examiner joined Fogel. Fogel discloses dermatological compositions comprising esters of fumaric and maleic acids which have useful safety and physical properties, specifically including melting point at body temperature (37°C).

The Examiner stated that "Fogel teaches that cosmetic solids ideally melt at body temperature (37°C; col. 1, lines 26-27)" (Office action, page 3, bottom paragraph). The undersigned respectfully suggests that this is a mischaracterization of the actual statement, which is quoted below.

"The C12-C15 alcohol blend esters of fumaric acid introduces one of the long sought ideal physical properties in a cosmetic **ester**, that is a solid which melts at body temperature, teaching the use of diisooctyl fumarate as an emollient. There are no closely related **diesters** used as cosmetic emollients." (col. 1, lines 24-29; emphasis added)

Thus, Fogel specifically refers to the ideal physical properties of a **cosmetic ester**, not a **cosmetic solid**, which is an overgeneralization of Fogel's disclosure. Fogel limits his disclosure specifically to **esters** as quoted below:

"It is the object of this invention to introduce a series of **esters** which are to be used as cosmetic emollients in cosmetic formulations." (col. 2, lines 19-21; emphasis added), and "It is the further object of this invention to introduce to the cosmetic chemist an **ester** which has ideal physical properties and safety which melts at body temperature." (col. 2, lines 34-36; emphasis added)

Applicants do not claim esters as wax phase components. Thus Fogel is an improper reference to support the obviousness rejection, and cannot cure the deficiency of Ansmann noted above, even if Ansmann were a proper primary reference, which it is not in view of the presently amended claims.

Previously presented claims 44-50 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Ansmann in view of Fogel, further in view of Bucheler et al. (US 4,996,004; "Bucheler"). Applicants respectfully traverse the rejection.

As discussed above, the present claim amendments distinguish the claims over Ansmann, and the addition of Fogel cannot cure the deficiency of Ansmann cited by the Examiner. Even if it could, the joining of Bucheler would be ineffective to teach the presently claimed process for the production of a wax dispersion for the following reasons.

Bucheler discloses a process for the preparation of a pharmaceutical or cosmetic dispersion comprising preparing a **water-in-oil**-pre-emulsion and pumping this pre-emulsion into a cooled aqueous phase through a specialized jet disperser of unique design as disclosed by Bucheler, wherein a **phase inversion** of the emulsion is effected in the jet disperser at the same time as homogenization, forming an oil-in-water emulsion.

In contrast applicants' process involves (1) providing a preliminary emulsion of melted wax phase, and (2) introducing the preliminary emulsion, under pressure, into a polymer-containing water phase at a temperature in the range of about 1 to 30°C. **No phase inversion is involved in applicants' process** since the preliminary emulsion is an **oil-in-water** emulsion (in contrast to Bucheler) as evidenced by applicants' production process example (specification, pages 29-30). Thus, the preliminary emulsion of the production example consists of 165 kg of melted wax phase in 430 kg of water, which would provide an oil-in-water emulsion. This is introduced under pressure into 400 kg

of cooled aqueous phase with control of temperature and efficient stirring, to give a dispersion of solidified wax.

Applicant's process is distinct from the cited prior art process in at least three ways: 1) the preliminary emulsion is not a water-in-oil emulsion, 2) no phase inversion is involved in the process, and 3) there is no need for a specially designed jet disperser associated with the phase inversion process as required by Bucheler.

In summary, Bucheler is not a proper reference to support the Examiner's obviousness rejection since the process disclosed is distinct from applicants' process, even if it were sufficient to overcome the deficiencies of Ansmann in view of Fogel, which it is not.

Conclusion

In conclusion, in view of the above claim amendments and remarks, applicants believe that all of the pending claims as amended are in condition for allowance. The Examiner is respectfully requested to reconsider, withdraw the rejections and allow the claims.

If any additional fees are required in support of this application, authorization is granted to charge our Deposit Account No. 50-1943.

Respectfully submitted,

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